Serial No. 10/056,807 Dkt.: P0010412.00

Filing Date: January 25, 2002

Title: FLUID-ASSISTED ELECTROSURGICAL INSTRUMENT WITH SHAPEABLE ELECTRODE

REMARKS

The Office Action objected to the specification. The Office Action also objected to the drawings. Please find enclosed a proposed added Figure 12 that addresses the objections to the specification and drawings and renders them moot. Also, the specification has been amended to reference the added figure. No new matter is presented.

Claim 71 was allowed. The Examiner is respectfully thanked for acknowledging allowable matter in this case.

The Office Action rejected claims 54, 56-65 and 67-70 under 35 U.S.C. Section 103 (a) as being unpatentable over Fritzsch 5,441,499 in view of Jandak et al. (6,176,858) and further in view of Gentelia (5,599,348). The Office Action also rejected claim 66 under 35 U.S.C. Section 103 (a) as being unpatentable over Fritzsch 5,441,499 in view of Jandak et al. (6,176,858)/Gentelia (5,599,348) and further in view of Swanson et al. 6,123,702.

It is respectfully submitted that claim 54 has been amended and is in condition for allowance.

Fritzsch discloses a bipolar radio-frequency surgical instrument for cutting tissue. The surgical device is designed for laparoscopic surgery. Fritzsch states this means that it must be insertable through a trocar to the site of the operation without any problems. Typical laparoscopic surgeries include at least two body access points. One access point typically includes a viewing system with a light and one access point typically includes a surgical device for affecting tissue. All other things being equal, it is preferred to keep the size of the incision for an access point as small as possible.

The Office Action proposes that it would be obvious to add the battery and light system of Jandak to Fritzsch. The Office Action further suggests that it would further be

Serial No. 10/056,807 Dkt.: P0010412.00

Filing Date: January 25, 2002

Title: FLUID-ASSISTED ELECTROSURGICAL INSTRUMENT WITH SHAPEABLE ELECTRODE

obvious to add the indicator light of Gentelia to the combination of Jandak and Fritzsch. Applicants respectfully disagree for several reasons.

The system of Fritzsch is designed for laparoscopic surgical procedures. The addition of a battery and light system at its distal end would add bulk, weight and complexity to the ablation system of Fritzsch. This is inconsistent with the general desire in laparoscopic procedures to keep the incision length for trocar access to a minimum. One of ordinary skill in the art would not seek to add such a feature to the ablation system of Fritzch as such a proposed addition would add to the bulk, weight or size of the system.

Fritzsch is a *cutting* ablation system. This is a relatively aggressive form of ablation when compared to other forms of ablation such as an ablation system only designed to kill tissue while preserving its structural integrity. A cutting device removes tissue and creates an environment that is very likely to fog or cloud optical instrumentation, especially any located at a distal end portion of the system. One of ordinary skill in the art would not add a light to the distal end portion of the device that would only be quickly clouded or fogged by the cutting function of the device.

On multiple occasions, Fritzsch mentions problems associated with viewing during laparoscopic cutting procedures. These problems would not be solved by adding a light and battery system directly to Fritzsch. Instead, Fritzsch discloses a different solution to the viewing problem. As a result, Fritzsch teaches directly away from the proposed combination advocated by the Office Action.

Jandak discloses a transvessel system for performing transmyocardial revascularization or stimulating angiogenesis using a resistive heater. The transvascular system of Jandak operates very differently than the laparoscopic system of Fritzsch. This alone would lead one of ordinary skill in the art away from the combination of Jandak and Fritzsch as the differences in the operation of the two systems would not render the combination predictable.

Serial No. 10/056,807 Dkt.: P0010412.00

Filing Date: January 25, 2002

Title: FLUID-ASSISTED ELECTROSURGICAL INSTRUMENT WITH SHAPEABLE ELECTRODE

Gentelia et al. was also cited in the combination. Gentelia discoses a trocar device incorporating an electrosurgical cutting element. The cutting element is used to make a guide hole for the cannula and enables the remainder of the trocar assembly to enlarge the puncture. An electronic control circuit senses the current flow to the cutting element and, when the trocar device breaks through the wall of the organ being cut, this circuit cuts off the connection to the associated electrosurgical generator.

The Office Action referenced reference character 94 and column 5, line 64 – column 6 line 11 of Gentelia. This passage states:

In order to alert the surgeon to the fact that the reset delay period is being timed out, an intermediate stage of the counter of the reset delay counter circuit 86 is used to cause an indicator light or lamp (e.g. a LED) 94 to blink during the inhibit delay period. ... When the output of switch 90 is low, meaning that control relay 88 is actuated and the electrosurgical generator is turned on, LED 94 will also be continuously on to provide an indication to the surgeon that the generator is on. Further ... when the generator is off but the reset delay period is being timed out, the intermediate stage of the reset delay counter 86 will provide a pulsed signal to NOR gate 96 which will cause blinking of LED 94 during this period.

This is a very different circuit than the battery/heater circuit of Jandak. Because these circuits are so different, there is no indication that one of ordinary skill in the art would have any expectation of success in combining them. As a result, it is respectfully suggested that the combination of Fritzsch, Gentelia and Jandak is inappropriate to arrive at the present invention and it should be withdrawn.

Swanson does not cure the deficiencies of Fritzsch, Gentelia and Jandak. As a result, claim 66 is also allowable as well.

Dkt.: P0010412.00

Serial No. 10/056,807

Filing Date: January 25, 2002

Title: FLUID-ASSISTED ELECTROSURGICAL INSTRUMENT WITH SHAPEABLE ELECTRODE

It is respectfully submitted that the pending claims are in condition for allowance.

If the Examiner comes to believe that a telephone conversation may be useful in addressing any remaining open issues in this case, the Examiner is invited to contact the undersigned at 763-505-8426.

No fee is believed due for the submission of this amendment. Please charge any additional fees or credit any overpayment to Deposit Account No. 01-2525.

If the Examiner comes to believe that a telephone conversation may be useful in addressing any remaining open issues in this case, the Examiner is invited to contact the undersigned agent at 763-505-8426.

Respectfully submitted,

Date: September 17, 2010

Jeffrey J. Hohenshell, Reg. No. 34,109

Medtronic, Inc.

710 Medtronic Parkway Minneapolis, MN 55432

Tel. 763-505-8426 Fax. 763-505-8436

Customer No.: 77218